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## ABSTRACT

This report is based on evidence that despite the negative outcomes so often associated with early childbearing, not all teenage parents experience difficult lives. Given the heterogeneity of outcomes among teenage parents and their children, the issue addressed in the research is to identify the factors that explain variations in academic achievement and school performance among the children of teen parents. Data are from the 1976 National Survey of Children. Analyses were conducted separately by race and birth order, and by whether or not the teenage mother had dropped out of school prior to becoming pregnant. Social and economic variables were controlled for. Results indicate that predictors of vocabulary score include mother's age at first birth, her education, income, and the child's number of siblings. Whether the mother was enrolled in school when she became pregnant has a very strong association with her child's subsequent vocabulary score. It is not clear what it is about being a drop-out that results in poorer outcomes for children. One conclusion of the research is that out-of-school adolescents are a high risk group that should be of particular concern to those planning pregnancy prevention efforts, but they may be especially difficult to reach. (CR)

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# Children of Teen Parents: Heterogeneity of Outcomes

by

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## SUMMARY:

1. **Childrearing Among Teenagers.** Teenage mothers face a number of impediments to childrearing. As a group, teen mothers complete fewer years of schooling, have larger families, and are less likely to be married to their child's father. They are more likely to experience poverty, to live in a neighborhood they describe as undesirable, and to receive welfare (see Table 1). Teenage mothers are also more likely to worry about money and are less likely to feel positively about their own lives and about having children again (see Table 4).

2. **Heterogeneity Among Teenage Parents.** Despite the negative outcomes so often associated with early childbearing, not all teenage parents experience difficult lives. Teenage parents are a heterogeneous group, like any other. Some enter lasting and happy marriages. Many avoid poverty and welfare (see Table 1), feel positively about their own lives and their families (Table 4), and manage to raise children who are happy (Table 3) and who do well in school (Table 2). The odds are tougher; but many surmount the odds.

3. **Research Issue: Factors Explaining Diverse Educational Outcomes.** The issue addressed in this project is this: "Given the heterogeneity of outcomes among teenage parents and their children, what factors can be identified that explain variations in academic and emotional outcomes among the children of teen parents?" The outcomes of interest in the current presentation are academic achievement and school performance.

4. **Outcome Measures.** The variables used to measure academic achievement are (a) the child's score on the Peabody Picture Vocabulary test, adjusted for the child's age, with a mean of 50

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and a standard deviation of 10, and (b) whether the child is behind the grade expected for a child of his or her age. These variables represent only two out of a number of possibilities; they were selected for this presentation because they represent important but different measures of academic achievement. The vocabulary score measures both innate ability as well as stimulation in the home environment. Being behind grade for age measures the child's success in a real-world setting as affected by academic performance and school-assessed emotional maturity. It should be noted that the Peabody Picture Vocabulary Test is more a test of analytic capacity than of verbal fluency, and typically, as in this study, boys tend to score higher than girls. On the other hand, boys are more frequently held back in school than girls, an effect which is also found in these data.

5. Data. Data used in these analyses are from the 1976 National Survey of Children, a nationally representative survey of children aged 7 to 11 in 1976, designed by Nicholas Zill, Ph.D. of Child Trends, and sponsored by the Foundation for Child Development. Data were collected on 2,301 children in 1,747 households, with an interview response rate of 80 percent. Interviews were conducted with the eligible child and the parent most capable of providing information about the child, usually the mother. In families with two eligible children, both were interviewed; if there were three or more, two were selected at random. Black households were oversampled to produce interviews with approximately 500 black children. Weights were developed to adjust for this oversampling, for family size, and for non-response. A follow-up study of schools attended by the children in the survey was carried out in the spring of 1977. School information was obtained on 1,682 children. The children who are the subjects of this study may be of any birth order. Although not all of the children studied are first borns, we examine the effects of the mother's age at her first birth. However, the final analyses are conducted on parity sub-samples, specifically, first-borns, second-borns, and a sample combining third and fourth-borns.

6. Race Differences. One of the strongest and most pervasive patterns found as we have examined the data is the disadvantaged position of black children relative to white children. In every age-at-first-birth category, black children are disadvantaged (see Table 1). They are less likely to live with a mother who has completed high school, more likely to be poor, less likely to live in a home owned by their family, more likely to live in a neighborhood the parent describes as only fair or poor for children, more likely to have many siblings, and more likely to receive welfare assistance. Because of these differences, we have conducted all of our analyses separately by race.

7. The Bivariate Association Between Adolescent Motherhood and Children's Academic Performance. In line with other studies, we find that the children of early childbearers do less well than the children of older mothers on a variety of measures of academic achievement and school performance. This is particularly true of white children (see Table 2). Children of teenage mothers are less likely to obtain a high score on the Peabody Picture Vocabulary Test, more likely to be behind the modal grade for a child of their age, less likely to be described as adjusting well to school by either their parent or their teacher, and less likely to be described as doing well in school either by their parent or their teacher. In addition, their parents are less likely to expect them to continue with their schooling past high school, and the child is more likely to be described by their parent as being confused, restless, and as having difficulty concentrating. Despite all this, the children of teenage mothers are no more negative about school than the children of older mothers. It is important to note that the strength and consistency of these results among whites is not matched among blacks, though the general trend is in the same direction. In keeping with the goal of this study -- explaining variations in outcomes -- we wish to note that a substantial proportion of the children of teenage parents are doing quite well. To explore which variables affect this, we have conducted a number of multivariate analyses.

8. Multivariate Analyses with Social and Economic Control Variables. One of the first questions addressed is the extent to which the children's poorer school performance is a reflection of the lower social and economic attainment of their parents. This analysis is shown for whites in Table 5A and for blacks in Table 5B. Consider first the columns of values unadjusted for the other variables in the model. Among whites, vocabulary score is higher among the children of older mothers and better-educated mothers, among children living with both biological parents, and those living in affluent families, small families, and families that have not moved frequently. The one exception to these unsurprising results is the very high vocabulary score among children born to the very youngest white mothers, a group that will receive further attention later. Considering the measure of being behind modal grade, it can be seen that the same set of variables predict to being behind modal grade for white children, and here the effect of age at first birth is more nearly linear. Among blacks, the predictors of vocabulary score are nearly the same: mother's age at first birth, her education, income and the child's number of siblings. Among black children, being behind modal grade is strongly

predicted by having a teenage mother, a poorly educated mother, a low income family, and many siblings, and by moving frequently. Being behind grade for age is less frequent among black children living with both of their biological parents and among those living with the mother and others. The latter result may reflect the positive influence of the extended family on child well-being noted in other studies. These effects are very much the effects one would expect to find. The most important reason for doing this analysis is to explore the impact on the age at first birth variable of adding the social and economic control variables. Age at first birth and mother's education have unadjusted effects (as measured by eta, analogous to a simple beta in dummy variable regression) that are quite high. However, the effects of these variables controlling for other predictors (as measured by beta, analogous to partial betas in dummy variable regression) are considerably diminished. The reason for this diminished impact has been the subject of much further analysis.

9. Teen Mothers Who Dropped Out of School Before Pregnancy. As mentioned above, a considerable literature documents the impact of adolescent childbearing on school dropout. Less noticed but equally important have been consistent findings that a substantial proportion of teenage mothers are already out of school when they become pregnant. To explore the impact of the mother's own educational progress on her child's outcome, we created a variable that separates women with the same approximate age at first birth into two groups: the dropouts, mothers who had already dropped out of school before becoming pregnant, and the nondropout mothers, those who as best we can determine were in school when they became pregnant, though many of them dropped out shortly thereafter. Among women older than high school age at first birth, being a dropout is defined as not completing high school, while the non-dropouts completed at least 12 years of education. (Thus a mother whose first child was born when she was 16, but her completed education is eighth grade is coded as a dropout; while another mother who was also 16 but who completed eleven grades is coded as a non-dropout. Similarly, a mother who was 19 when her first child was born would be coded as a dropout if her educational attainment was only eleventh grade; while a high school graduate would be coded as a non-dropout.) Since the family environment is very different for the first child of a teenage mother than for later-born children, the analyses of the effect of school dropout were done separately for first-born children and for second-born children. Third and fourth-born children are combined into a third category.



10. Multivariate Analyses of the Effects of Mother's Enrollment Status at the Time of Pregnancy. Whether the mother was enrolled in school when she became pregnant has a very strong association with her child's subsequent vocabulary score. Among white first-borns whose mothers were 17 or younger when they were born, the average vocabulary score is 50.8 among children whose mothers were enrolled in school when they became pregnant, compared with 47.5 among the children of dropouts. A similar difference appears consistently for each pair. Among mothers aged 18-19 when their first child was born, the average vocabulary score is 52.6 in the non-dropout group and 46.5 in the dropout group. Even among mothers 23 and older when their first child was born, the same effect is visible. (In this case, as noted above, the effect is for high school graduation status.) In fact, the identical trend is found among blacks within every age at first birth group: the children of women who had already dropped out of high school before their first pregnancy have substantially lower scores than the children of women who did not drop out. In addition, the association between the mother's dropout status and lower child vocabulary scores is found among later-born children as well as first-borns suggesting that this association is not simply the result of transient circumstances related to being the first born child of a very young mother but to characteristics of the family environment or the mother herself.

11. Explaining the Effects of Enrollment Status. In an attempt to discover what aspects of the family environment or the mother's characteristics account for this strong and consistent "drop-out" association, we have run a number of multiple classification analyses using a variety of variables that we hypothesized might explain or mediate this association. A typical example is shown in Table 6A for whites and Table 6B for blacks. By comparing the unadjusted means with the means adjusted for other variables (family composition and sex of child, birth spacing between the study child and older or younger siblings, the mother's statement that she feels worn out, and the child statement that he or she wants more time with the mother in this particular MCA), the effect of these control variables can be examined. Comparing the unadjusted with the adjusted scores shows that in virtually no instance do the control variables explain the association. The effect is extremely robust among both whites and blacks. The children of dropouts consistently score lower, even when numerous other factors are statistically controlled. Moreover, the vocabulary scores in the dropout group seem to increase only moderately as the mother's age at first birth rises, while the scores in the

non-dropout group rise substantially as the mother's age at first birth increases, at least for first-born children. Dropouts account for a far larger proportion of the younger mothers, however, than they do among the older mothers.

12. Children Who are Behind Modal Grade. Whether a child is behind the modal grade for a child of their age is strongly related to the mother's age at first birth. Interestingly, the mother's own dropout status is not as consistently related to the child's being behind grade as it is to vocabulary score. Nevertheless, in most cases, the proportion of children behind grade for age is still higher in the dropout category than in the non-dropout category.

13. Implications. The implications of these results can not be fully drawn out, since we cannot be precisely sure what it is about being a drop-out that results in poorer outcomes for children. Mothers who dropped out may have lacked motivation, for example, or they may not be particularly bright; we cannot ascertain which with these data. However, since the implications would be quite different depending on whether innate ability or motivation or a mix of the two appear to be causal, research to differentiate the two seems warranted. The consistency of the results for blacks and whites is also noteworthy; this consistency may suggest an additional research why further research to explain the association between maternal school dropout and children's academic performance would be fruitful. One conclusion that is suggested by the current results is that out-of-school adolescents are an at-risk group that should be of particular concern to those planning prevention efforts. However, since they are out of school, they may be especially difficult to reach. This is not to downplay the importance of prevention among in-school youth; other data (not shown here) clearly indicate that school drop-out typically follows an early birth and thus poses clear costs as well.

This study, "Children of Teen Parents: Heterogeneity of Outcomes" is funded by the National Institute of Child Health and Human Development, under Contract HD18427-02.

Table 1: Measures of Social and Economic Status, Among Children Living with Biological or Adopted Mothers, Who Were Aged 7-11 in 1976, by Mother's Age at the Birth of Her First Child and Race,

	WHITES								BLACKS							
	Mother's Age at Birth of First Child								Mother's Age at Birth of First Child							
	<17	17-18	19-20	21-22	23-24	25+	Adop.	Total	<17	17-18	19-20	21-22	23-24	25+	Adop.	Total
Mothers with High School Diploma (%)	27	50	72	86	86	84	81	73 (.0000/- .29/- .39)	22	40	43	58	48	33	55	39 (ns/- .09/- .13)
Family Income Less than \$10,000 (%)	34	32	29	19	18	18	20	24 (.0000/.13/.22)	88	81	83	45	61	64	65	76 (.0002/.23/.38)
Parent Says Neighborhood Poor or Fair (%)	33	17	17	15	7	12	20	15 (.0000/- .09/- .13)	53	50	30	40	55	47	7	44 (ns/- .07/- .09)
Three or More Moves in Last 5 Years	18	27	24	16	13	10	20	18 (.0000/- .14/- .20)	32	15	23	22	21	21	0	22 (ns/- .07/- .09)
Homeowners (%)	66	76	76	82	90	85	84	81 (.0000/.11/.23)	27	38	39	57	45	41	58	39 (.03/.14/.18)
Five or More Children (%)	24	21	22	26	17	11	7	20 (.004/- .07/- .12)	52	31	43	29	37	20	30	37 (.019/- .015/- .20)
Mother's Employment/ Welfare Status (%)																
Homemaker; no welfare	50	53	51	49	50	54	78	52	17	14	17	13	37	26	43	19
Welfare only	8	7	6	6	2	4	0	5	58	36	34	29	36	17	7	36
Welfare and employment	2	1	0	1	3	0	0	1	5	9	17	7	8	14	0	10
Employed full-time	27	29	29	26	25	24	13	26	16	36	25	42	19	32	48	29
Employed part-time	13	11	14	18	20	18	9	16	5	5	7	10	0	11	2	6
Number of Cases																
Home	69	260	393	325	221	254	53	1575	114	130	97	56	34	62	13	506
School	37	203	307	259	171	199	40	1216	66	91	65	34	20	32	6	314

Sources: Kristin A. Moore, James L. Peterson, and Christine W. Nord, "Children of Teen Parents, Heterogeneity of Outcomes," Child Trends, Inc., 1985.

Notes: Significance levels on Tables 1-4 are provided in each table in parentheses, under the 25+ column. They are calculated for ordinal data and therefore the adopted category was not included in these calculations. The values of tau C and gamma are then presented. Within parentheses, one can read as follows (significance/tau C/gamma); "ns" means not significant.



Table 2: Measures of Child's Academic Performance and School Standing, Among Children Living with Biological or Adopted Mothers, Who Were Aged 7-11 in 1976, by Mother's Age at the Birth of Her First Child and Race.

	WHITES								BLACKS							
	Mother's Age at Birth of First Child								Mother's Age at Birth of First Child							
	<17	17-18	19-20	21-22	23-24	25+	Adop.	Total	<17	17-18	19-20	21-22	23-24	25+	Adop.	Total
Scored 60+ on Peabody Picture Vocabulary Test (%)	13	15	12	19	29	29	30	20 (.0000/.13/.26)	6	7	7	11	3	17	44	9 (ns/.05/.20)
Behind Modal Grade For Age (%)	30	21	19	19	14	11	20	18 (.0002/-.08/-.18)	30	19	25	18	16	8	10	21 (.03/-.12/-.22)
School Adjustment Score (% good)																
Parent Assessment	43	42	49	44	58	57	50	49 (.0002/.11/.13)	48	46	47	38	49	49	84	47 (ns/-.01/-.01)
Teacher Assessment	22	26	27	34	37	44	30	32 (.0000/.14/.20)	7	9	10	27	28	21	11	14 (.02/.14/.36)
Child's School Progress (% doing well)																
Parent Assessment	51	46	51	52	61	62	53	54 (.0001/-.11/-.14)	46	44	48	46	48	50	84	47 (ns/-.03/-.04)
Teacher Assessment	24	32	29	42	40	48	34	37 (.0000/.15/-.20)	16	20	12	27	57	21	11	21 (ns/-.11/-.20)
Parental Educational Expectations (% > high school)	44	56	62	67	79	76	72	66 (.0000/.20/.28)	49	53	51	78	67	48	88	55 (ns/.08/.10)
Confusion/Concentration Scale (% high)	24	17	14	15	10	10	16	14 (.02/.04/-.14)	18	24	17	18	14	12	0	18 (ns/-.04/-.16)
Child's Attitude Toward School (% positive)	27	23	25	24	26	25	19	24 (ns/-.01/-.01)	35	36	28	26	52	30	27	33 (ns/.03/.04)
Number of Cases																
Home	69	260	393	325	221	254	53	1575	114	130	97	56	34	62	13	506
School	37	203	307	259	171	199	40	1216	66	91	65	34	20	32	6	314

Source: Kristin A. Moore, James L. Peterson, and Christine M. Nord, "Children of Teen Parents, Heterogeneity of Outcomes," Child Trends, Inc., 1985.

Table 3: Measures of Child's Psychological Well-Being and Feelings About His or Her Family, Among Children Living with Biological or Adopted Mothers, Who Were Aged 7-11 in 1976, by Mother's Age at the Birth of Her First Child and Race.

	WHITES									BLACKS								
	Mother's Age at Birth of First Child									Mother's Age at Birth of First Child								
	<17	17-18	19-20	21-22	23-24	25+	Adop.	Total		<17	17-18	19-20	21-22	23-24	25+	Adop.	Total	
Self-Esteem (% high)	37	35	30	36	39	30	43	34		28	25	38	38	60	54	33	36	
						(ns/-01/-02)								(.001/-16/.28)				
Child Wishes S/He Were Someone Else (% yes)	28	39	40	34	31	38	46	37		31	34	25	28	17	28	18	28	
						(ns/.02/.03)								(ns/-04/-07)				
Family Happiness, Child's View (% happy)	69	69	73	76	74	72	71	73		66	73	74	62	87	74	87	72	
						(ns/-03/-05)								(ns/-09/-15)				
Child's Feeling About Family (% positive)	20	32	29	31	31	28	35	30		24	25	28	32	19	44	16	28	
						(ns/-00/-01)								(ns/-09/-13)				
Fears of Being Hurt/Harmed (% highly fearful)	22	16	16	20	16	19	23	18		27	19	21	16	20	16	7	20	
						(ns/.01/.03)								(ns/-06/-12)				
Received/Needed Professional Help (%Yes)	15	14	10	18	8	10	16	12		11	11	9	5	6	3	7	8	
						(ns/-02/-07)								(ns/-05/-22)				
Child's Health (% excellent)	41	44	51	59	62	57	65	54		34	26	32	31	18	36	27	30	
						(.0000/-13/-17)								(ns/.00/.01)				
Number of Cases																		
Home	69	260	392	325	221	254	53	1575		114	130	97	56	34	62	13	506	
School	37	203	307	259	171	199	40	1216		66	91	65	34	20	52	6	314	

Source: Kristin A. Moore, James L. Peterson, and Christine W. Nord, "Children of Teen Parents, Heterogeneity of Outcomes," Child Trends, Inc., 1985.

Table 4: Measures of Family Psychological Environment, Among Children Living with Biological or Adopted Mothers, Who Were Aged 7-11 in 1976, by Mother's Age at the Birth of Her First Child and Race.

	WHITES								BLACKS							
	Mother's Age at Birth of First Child								Mother's Age at Birth of First Child							
	<17	17-18	19-20	21-22	23-24	25+	Adop.	Total	<17	17-18	19-20	21-22	23-24	25+	Adop.	Total
Child Live With Biological Father (%)																
Never	3	4	3	1	0	3	80	5	34	24	22	8	4	20	76	23
Ever, Not Currently	24	24	16	14	13	14	11	16	37	31	33	35	44	28	6	33
Currently	73	72	81	85	87	84	9	79	29	45	45	57	52	52	19	44
								(.0000/.07/.19)								(.002/.17/.22)
Mother Would Definitely Have Children Again (%)	79	81	88	86	89	88	--	86	56	71	67	79	84	69	--	69
								(.006/-.05/-.14)								(.04/-.13/-.18)
Mother Worries Income Not Enough All or Most of the Time (%)	43	37	32	30	26	23	22	30	72	54	61	67	50	34	52	59
								(.0000/.12/.18)								(.03/.14/.18)
Mom Sad and Blue Very or Fairly Often (%)	26	13	9	8	5	6	20	9	34	33	23	7	25	9	39	25
								(.0000/.08/.30)								(.001/.20/.33)
Worn Out From Burden of Family All, Most, or Some of the Time (%)	48	53	56	60	57	54	49	56	57	50	56	58	66	41	23	53
								(.08/.02/.12)								(ns/-.03/-.11)
Mother's Own Life Going "Tops" or Very Good (%)	39	41	50	54	60	50	47	50	27	24	29	26	32	44	25	29
								(.001/-.10/-.12)								(ns/-.09/-.14)
Mother Tense or Edgy Very or Fairly Often (%)	43	34	32	34	17	32	44	32	55	49	39	36	21	22	41	41
								(.005/.07/.10)								(.0002/.25/.32)
Number of Cases																
Home	69	260	393	325	221	254	53	1575	114	130	97	56	34	62	13	506
School.	37	203	307	259	171	199	40	1216	66	91	65	34	20	32	6	314

Source: Kristin A. Moore, James L. Peterson, and Christine W. Nord, "Children of Teen Parents, Heterogeneity of Outcomes," Child Trends, Inc., 1985.

**Table 5-A: Vocabulary Score (Peabody Picture Vocabulary Test) and Percent Behind Grade for Age, Among Children, Aged 7-11 and Living with their Mothers in 1976, by Family Characteristics: Multiple Classification Analysis of Whites**

	Sample Size	Vocabulary Score		Eta	Beta	Behind Grade for Age		Eta	Beta
		Unadj.	Adj.			Unadj.	Adj.		
Mother's Age at First Birth									
≤ 15	23	51.3	54.4			26%	17%		
16	46	48.4	50.2			32	29		
17	90	48.7	49.5			22	21		
18	166	49.1	50.7			20	18		
19	191	46.9	50.4			22	20		
20	194	49.8	49.9			16	16		
21-22	319	51.6	51.3			19	20		
23-24	221	53.7	52.7			14	15		
≥ 25	254	54.0	52.6	.21	.12			.12	.09
Mother's Highest Grade									
0-9	207	46.5	47.7			33%	30%		
10-11	232	49.1	50.5			18	15		
12	725	51.7	51.6			16	17		
13-15	185	53.5	52.5			09	11		
≥ 16	155	57.1	54.8	.30	.19	11	16	.18	.14
Family Configuration									
Mother and father	1,218	51.6	51.2			16%	17%		
Mother and stepfather	126	50.0	50.9			18	14		
Mother alone	122	50.1	52.0			26	22		
Mother and other adults	38	47.9	50.3	.08	.03	33	27	.09	.06
Sex of Child									
Male	756	52.5	52.5			22%	22%		
Female	748	49.9	50.0	.14	.13	13	13	.12	.12
Family Income									
< \$10,000	362	48.1	49.3			27%	23%		
\$10,000-19,999	780	51.4	51.3			15	15		
≥ \$20,000	362	54.5	53.3	.24	.15	14	17	.14	.08
Number of Siblings									
None	88	55.7	55.5			14%	14%		
One or two	504	52.0	51.6			15	16		
Three or more	912	50.5	50.7	.14	.12	20	19	.06	.05
Addresses in Last 5 Years									
One	817	51.9	51.5			16%	17%		
Two or Three	410	51.1	51.1			16	16		
Four or more	277	49.5	50.7	.10	.03	25	22	.09	.06
R		.15				.07			
Adjusted R		.14				.06			

Source: Kristin A. Moore, James L. Peterson, and Christine W. Nord, "Children of Teen Parents, Heterogeneity of Outcomes," Child Trends, Inc., 1985.

**Table 5-B: Vocabulary Score (Weabody Picture Vocabulary Test) and Percent Behind Grade for Age, Among Children, Aged 7-11 and Living with their Mothers in 1976, by Family Characteristics: Multiple Classification Analysis of Blacks**

	Sample Size	Vocabulary Score		Eta	Beta	Behind Grade for Age		Eta	Beta
		Unadj.	Adj.			Unadj.	Adj.		
Mother's Age at First Birth									
≤ 14	27	39.2	41.5			38%	32%		
15	38	43.7	45.4			39	34		
16	49	42.9	42.2			18	17		
17	66	44.4	45.1			21	21		
18	67	45.9	45.4			16	20		
19	48	45.1	45.2			16	17		
20	49	45.4	44.7			34	34		
21-22	56	45.0	43.4			18	21		
23-24	33	43.3	43.9			16	16		
≥ 25	62	46.5	46.3	.15	.12	08	07	.23	.20
Mother's Highest Grade									
0-9	145	41.2	41.5			30%	29%		
10-11	156	42.9	42.9			21	20		
12	139	46.6	46.7			16	16		
13-15	35	54.6	53.7			10	16		
≥ 16	20	50.4	49.3	.36	.33	03	10	.18	.14
Family Configuration									
Mother and father	202	44.5	43.7			14%	16%		
Mother and stepfather	35	45.8	43.3			26	29		
Mother alone	194	44.5	45.7			30	28		
Mother and other adults	64	44.2	45.0	.03	.09	18	16	.18	.15
Sex of Child									
Male	250	45.6	45.5			23%	24%		
Female	245	43.4	43.6	.11	.09	19	18	.05	.06
Family Income									
< \$10,000	380	43.5	44.0			24%	22%		
≥ \$10,000	115	48.4	46.4	.20	.09	11	20	.13	.02
Number of Siblings									
None	25	49.8	45.7			13%	20%		
One or two	95	45.9	43.9			16	20		
Three or more	375	43.8	44.7	.14	.04	23	22	.09	.02
Addresses in Last 5 Years									
One	222	43.2	43.5			20%	22%		
Two or Three	165	45.7	45.5			20	20		
Four or more	108	45.4	45.1	.11	.09	26	22	.07	.03
Adjusted R									
		.17				.10			
		.13				.06			

Source: Kristin A. Moore, James L. Peterson, and Christine W. Nord, "Children of Teen Parents, Heterogeneity of Outcomes," Child Trends, Inc., 1985.



Table 6-A: Vocabulary Score and Percent Behind Grade for Age, Among Children Living with their Mothers, Aged 7-11 in 1976, by Family and Child Characteristics, by Parity: Multiple Classification Analysis of Whites

	Parity			Vocabulary Score						% Behind Grade for Age					
				Parity 1		Parity 2		Parity 3-4		Parity 1		Parity 2		Parity 3-4	
	1	2	3-4	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.
Mother's Age at First Birth and Whether Mother Dropped Out Prior to Pregnancy															
≤ 17 and Dropout	18	13	23	47.5	46.9	47.0	41.1	49.3	48.2	31%	31%	31%	31%	47%	47%
≤ 17 and Other	29	27	23	50.8	50.5	49.6	49.7	51.9	51.5	33	31	10	10	18	23
18-19 and Dropout	41	40	45	46.5	46.8	48.1	48.4	47.5	47.6	23	23	25	25	24	21
18-19 and Other	76	59	51	52.6	52.2	49.8	50.1	52.7	53.3	15	14	16	16	12	12
20-22 and Dropout	28	23	24	48.4	48.3	47.0	47.4	46.9	46.6	30	27	31	30	31	29
20-22 and Other	159	107	88	52.7	52.8	50.9	50.8	51.2	51.0	14	16	14	15	14	16
≥ 23 and Dropout	19	23	22	49.6	50.2	49.2	49.7	49.1	49.5	11	09	15	15	31	30
≥ 23 and Other	178	125	66	55.8	55.8	54.8	54.4	53.6	53.7	11	12	12	12	14	14
Eta, Beta				.31	.31	.33	.30	.24	.26	.19	.17	.16	.16	.24	.22
Sample Size of Parity Subgroup				548		417		342		551		415		345	
R				.15		.16		.11		.07		.06		.14	
Adjusted R				.12		.13		.07		.05		.03		.10	

Note: Adjusted values control for family composition and sex of child, birth spacing, mother's assessment of how worn out she feels, and child's assessment of whether the mother spends enough time with the child.

Source: Kristin A. Moore, James L. Peterson, and Christine W. Nord, "Children of Teen Parents, Heterogeneity of Outcomes," Child Trends, Inc., 1985.

Table 6-B: Vocabulary Score and Percent Behind Grade for Age, Among Children Living with their Mothers, Aged 7-11 in 1976, by Family and Child Characteristics, by Parity: Multiple Classification Analysis of Blacks

	Parity			Vocabulary Score						% Behind Grade for Age					
	1	2	3-4	Parity 1		Parity 2		Parity 3-4		Parity 1		Parity 2		Parity 3-4	
	Unadj.	Adj.	Unadj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.
Mother's Age at First Birth and Whether Mother Dropped Out Prior to Pregnancy															
≤ 17 and Dropout	12	7	11	40.0	37.9	40.6	41.9	39.2	39.8	66%	72%	43%	46%	10%	11%
≤ 17 and Other	39	22	21	46.5	47.1	46.0	45.5	48.5	48.3	23	20	9	11	16	17
18-19 and Dropout	12	16	12	35.0	35.6	45.6	46.9	49.2	49.1	23	22	11	15	14	16
18-19 and Other	16	14	12	49.4	49.2	46.7	47.6	47.7	47.4	2	6	39	42	12	10
20-22 and Dropout	10	9	9	45.8	46.3	43.9	44.3	43.2	43.7	39	33	34	34	30	31
20-22 and Other	23	15	16	50.5	49.3	43.8	42.3	47.8	47.8	10	16	39	34	22	20
≥ 23 and Dropout	11	12	13	42.9	42.5	41.4	41.9	40.8	40.1	4	8	16	18	15	16
≥ 23 and Other	17	16	7	55.6	57.2	50.1	48.6	47.1	45.3	5	0	7	0	0	0
Eta, Beta				.40	.49	.26	.25	.31	.31	.45	.46	.34	.35	.18	.19
Sample Size of Parity Subgroup				140		111		101		137		110		100	
R				.30		.25		.17		.32		.18		.09	
Adjusted R				.23		.14		.04		.24		.06		.00	

Note: Adjusted values control for family composition and sex of child, birth spacing, mother's assessment of how worn out she feels, and child's assessment of whether the mother spends enough time with the child.

Source: Kristin A. Moore, James L. Peterson, and Christine W. Nord, "Children of Teen Parents, Heterogeneity of Outcomes," Child Trends, Inc., 1985.